# Before the Utah Public Service Commission PSC Case No. 01-035-01

**Rate Design** 

**PacifiCorp** 

Rebuttal Testimony of

**Alan Chalfant** 

On Behalf of

**Utah Industrial Energy Consumers** 

Project 7518 August 31, 2001



### **PacifiCorp**

### Before the

### **Utah Public Service Commission**

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### Rate Design

### **Rebuttal Testimony of Alan Chalfant**

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	Α	Alan Chalfant; 1215 Fern Ridge Parkway, Suite 208; St. Louis, Missouri 63141-2000.
3	Q	WHAT IS YOUR OCCUPATION?
4	Α	I am a consultant in the field of public utility regulation with Brubaker & Associates,
5		Inc., energy, economic and regulatory consultants.
6	Q	HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?
7	Α	Yes, I have.
8	Q	ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?
9	Α	I am appearing on behalf of the Utah Industrial Energy Consumers (UIEC). The
10		members of UIEC include numerous large customers of PacifiCorp (Company).

#### 1 Q WHAT IS THE SUBJECT OF YOUR REBUTTAL TESTIMONY?

My rebuttal testimony will discuss the Division of Public Utilities' (Division) cost of service study, proposed revenue allocation, and certain rate design issues. I will also address the proposals of Dr. Charles Johnson on time-of-use rates and special contracts and Dr. George Sterzinger's proposals concerning revenue allocation and the treatment of special contracts.

#### Comments on the Division's Direct Testimony

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### 8 Q HAVE YOU REVIEWED THE DIVISION'S COST OF SERVICE STUDY PRESENTED

#### BY DR. LAURA NELSON IN HER DIRECT TESTIMONY?

Yes. Dr. Nelson used a Commission Staff COS model, which is based on the PacifiCorp model with certain adjustments. The most important such adjustment was the use of the Division's revenue requirement, which calls for a \$5.8 million rate increase as compared to the \$142 million increase incorporated in the Company's cost of service study. Other changes were to the system loss factors and system overhead costs in particular accounts.

#### Q DO YOU HAVE ANY COMMENTS ON THESE CHANGES?

Yes. The changes concerning overhead costs was made because of a concern that the allocation of these costs by the Company was inconsistent with the way PacifiCorp allocates these costs on an inter-jurisdictional basis. In an attempt to correct for this inconsistency, Dr. Nelson applies a plant allocator rather than the Company's proposed labor allocator.

#### 1 Q IS THIS CHANGE APPROPRIATE?

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While Dr. Nelson's concern that jurisdictional and inter-jurisdictional allocations should be consistent is understandable, that consistency would be more appropriately achieved by changing the allocation of all overhead costs to a labor basis.

### Q WHY WOULD USE OF THE LABOR ALLOCATOR RESULT IN A CONSISTENT ALLOCATION OF OVERHEAD COSTS?

Because that is the method of allocating overhead costs which is used by the Federal Energy Regulatory Commission (FERC). The FERC has a long-standing policy of requiring utilities to allocate overhead costs among functions using a labor allocator. This was clearly stated by the FERC as early as 1978 in Opinion No. 20-A regarding Minnesota Power & Light Company (Docket Nos. E-9499 and E-9502) and Superior Water, Light and Power Company, (Docket No. ER76-20). There, the FERC stated with respect to General Plant costs:

We now want to make it entirely clear that Opinion No. 20 should be considered a precedent on the question of the functionalization and allocation of General Plant. What we find determinative is that in most cases General Plant is more likely to be associated with labor costs than plant costs." (5 FERC 61,150)

The fact that the FERC remains firm on this issue is demonstrated in an Order issued May 28, 1998 in Docket Nos. ER98-2382-000, OA96-199-002, and OA97-679-000 involving Montana Power Company. There, the Commission summarily rejected four proposals with respect to the Company's filed cost of service study, including the failure to use labor ratios to allocate General Plant costs. The FERC requires a corresponding labor allocation of Administrative and General Expenses.

## 1 Q ARE THERE REASONS THAT MAKE THE USE OF A LABOR ALLOCATOR 2 ESPECIALLY IMPORTANT IN THIS CASE?

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Yes. PacifiCorp has proposed a restructuring of its corporation, which it has filed in Utah in Docket No. 00-035-15. This restructuring has many far-reaching implications, one of which will involve the unbundling of its generation from its other functions. A key issue in that respect will be the proper allocation of overhead costs to each function. In order for any corporate unbundling which could be approved in that proceeding to be done right, it is important that overhead costs be properly allocated to the Company's functions in the cost of service study that is approved in this case.

### 10 Q HOW HAS THE DIVISION PROPOSED TO ALLOCATE ITS RECOMMENDED \$5.8 11 MILLION INCREASE?

It has proposed to allocate the increase across-the-board to three classes – Residential Rate 1, Irrigation Rate 10, and Mobile Home Park Rate 25. This is a reasonable application of the Division's cost of service study results to PacifiCorp's revenue requirement.

# THE DIVISION'S RATE DESIGN WITNESS, REBECCA WILSON, RECOMMENDS DECREASING THE CUSTOMER CHARGES IN GENERAL SERVICE TIME OF DAY OPTION RATES. DO YOU AGREE WITH THAT PROPOSAL?

No. The existing customer charges in Rates 6 and 9 are well below cost. For example, the total of customer-related expenses for customer accounts, customer service, and sales in the Division's cost of service study is approximately \$1.5 million. Dividing this by the customer charge billing units equates to a charge of more than \$430 per month. This does not include any allocation of plant costs such as meters. Thus, it appears that a large amount of these costs are already recovered through energy charges. To

transfer additional costs from the customer charge to the energy charge would cause additional distortion of the price signals that customers receive.

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#### WHAT IS YOUR RECOMMENDATION CONCERNING THIS PROPOSAL?

Any reduction of Rate 6 and 9 customer charges is contrary to cost of service principals.

Therefore, I would oppose the proposed changes. If, however, it is decided to reduce customer charges, the resulting lost revenue should be recovered through increases in demand charges not energy charges.

### WHY IS IT MORE APPROPRIATE TO RECOVER THE LOST CUSTOMER CHARGE REVENUE THROUGH DEMAND CHARGES RATHER THAN ENERGY CHARGES?

To the extent that there is controversy about the classification of customer costs, that controversy relates to whether costs should be considered customer-related or demand-related. Both customer- and demand-related costs are fixed costs, which do not vary with the amount of energy consumed.

Recovering fixed costs through energy charges has three undesirable consequences. First, it provides customers with poor price signals. Second, it recovers costs from the wrong customers. To the extent that fixed costs are recovered through energy charges, customers with high load factors that use electricity the most efficiently pay more than if these costs were properly recovered through fixed charges. Third, unless actual sales exactly match test year sales, the utility will either over- or underrecover its costs.

Although I disagree with the basic principal of setting customer charges below the associated per unit cost, if the resulting revenues are transferred to demand charges, the damage to price signals, allocation of costs to individual customers, and

1	avoiding unnecessary over- or under-recovery of total costs by the utility are all reduced
2	as compared to shifting those costs to the energy charges.

## Q DO YOU AGREE WITH MS. WILSON'S PROPOSALS OPPOSING THE CLOSING OF RATE 9 TO LARGE CUSTOMERS?

Yes. I also oppose the closing of this rate to large customers for several reasons as discussed in my direct testimony. Moreover, Ms. Wilson's proposed new rate for customers taking delivery at 138 kV is a much more positive solution to the Company's claimed concern that the larger customers do not have similar cost characteristics than simply closing the rate.

# 10 Q IS IT POSSIBLE THAT THE COST OF SERVING SPECIAL CONTRACT 11 CUSTOMERS COULD BE LESS THAN RATE 9 OR THE NEW RATE PROPOSED BY 12 MS. WILSON?

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It is both possible and likely. The purpose of special contracts is to better reflect in those contracts the differences in characteristics between individual customers and class averages. Standard tariff rates that are designed to reflect average characteristics cannot possibly recognize the numerous unique characteristics of large industrial loads.

### 1 Comments on the Direct Testimony of Dr. Charles Johnson

2 Q ARE YOU FAMILIAR WITH THE TESTIMONY OF DR. CHARLES JOHNSON ON 3 BEHALF OF THE SALT LAKE COMMUNITY ACTION PROGRAM, THE

CROSSROADS URBAN CENTER, AND UTAH LEGISLATIVE WATCH CONCERNING

TIME-OF-USE RATES FOR LARGE CUSTOMERS?

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Yes. Dr. Johnson proposes that the peak period for time-of-use rates be shortened to better reflect costs and that large customers which already have the necessary metering be billed on mandatory time-of-use rates.

#### 9 Q DO YOU AGREE WITH THESE PROPOSALS?

I agree with Dr. Johnson's concept but caution against rushing into the programs he proposes without adequate time for proper development and analysis. Before any time-of-use rates are made mandatory, it is critical that proper cost-based rates that reflect time varying cost differences be developed. The first step in this process is to identify the proper peak hours as Dr. Johnson has recognized. This step involves analysis of load patterns and identification of any trends in those patterns so that, once implemented, customers are not subjected to overly broad peak periods as in the present rate options or to frequent changes in the definition of the peak, which would prohibit meaningful planning on the part of customers.

Having determined the proper time-of-use periods, the next step is to assign or allocate costs to those periods. This is not a simple process and requires an unbundling of rates into their separate production, transmission, and distribution components. This is necessary because the extent to which costs vary by time-of-use differs as between the various functions. For example, while production costs will likely vary considerably with time-of-use, distribution costs may not.

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After determining the costs by period, the specific rates must be designed. This requires an estimate of billing units by time period. Estimating the billing units by time period, in turn, requires forecasting how customers will react to the time-of-use rates based on knowledge or estimates of those customers' demand elasticities.

Dr. Johnson has already identified, at pages 27 and 28 of his direct testimony, various other problems that will be encountered in the development of time-of-use rates.

### WHAT IS YOUR CONCLUSION WITH RESPECT TO DR. JOHNSON'S PROPOSALS **CONCERNING MANDATORY TIME-OF-USE RATES?**

While this is a reasonable goal, Dr. Johnson's proposal that the Company come forward with proposed time-of-use rates in its rebuttal testimony in this proceeding is not reasonable.

As Dr. Johnson notes, the Company is the only party with the data required to design proper time-of-use rates and other parties must rely on the Company to make the initial proposal. But, having seen that initial proposal, other parties will want to test it and analyze the data on which it is based. This will require considerable discovery and time to analyze the data once received as well as time to develop alternative proposals. It would be unreasonable to require parties to attempt to do so in response to a proposal that they see for the first time in the Company's rebuttal testimony.

DR. JOHNSON ALSO PROPOSES THAT ALL SPECIAL CONTRACT CUSTOMERS 19 Q BE BILLED ON TIME-OF-USE RATES. DO YOU AGREE WITH THAT PROPOSAL? 20 No. An advantage of special contracts is that the specific rates can be tailored to best 21 Α take into consideration a specific customer's load characteristics. In some cases, 22 particularly where customers already consume at a constant rate around the clock, there 23 may be other considerations that are more important than reflecting time-of-use in the

particular rates charged. In such cases, the contract rate reflects time-of-use as well as other considerations, which, in total, makes the contract beneficial for the Company and its other customers. In other cases, a more specific time-of-use design particularly related to an individual load may be more appropriate than the general design of time-of-use rates. An example of this might be a rate that charges a customer for the demands it places on the system at the time the system actually peaks. In short, it defeats the purpose of special contracts to determine the structure of the rate a priori.

## 8 Q DOES DR. JOHNSON MAKE ANY OTHER PROPOSALS WITH RESPECT TO 9 SPECIAL CONTRACTS?

10 A Yes. He recommends that PacifiCorp be required to include in each special contract a
11 provision stating that the Commission can modify the terms and charges of the contract
12 in a general rate case or other proceeding.

### Q IS THIS A REASONABLE REQUIREMENT?

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No. An important benefit to customers that enter into special contracts is rate stability. Based on this assurance of rate stability, customers make equipment selections, investment decisions, plant location decisions, and manpower choices. Absent the assurance of rate stability, customers may be unable to make long-term commitments to the Utah economy. Once again, removal of this flexibility in the negotiation of special contracts undercuts the viability of a useful tool that can provide benefits to customers, PacifiCorp, and the Utah economy.

1	Com	ments on the Direct Testimony of Dr. George Sterzinger
2	Q	ARE YOU FAMILIAR WITH THE TESTIMONY OF DR. GEORGE STERZINGER ON
3		BEHALF OF THE COMMITTEE OF CONSUMER SERVICES (COMMITTEE)?
4	Α	I am.
5	Q	WHAT IS DR. STERZINGER'S POSITION ON THE ISSUE OF REVENUE
6		ALLOCATION BETWEEN CLASSES?
7	Α	He proposes that if the Committee's net power costs are accepted, all classes should
8		receive an equal percent decrease except Schedule 23, which should receive a larger
9		decrease. If, on the other hand, the Company prevails on the net power cost issues and
10		receives a large increase, Dr. Sterzinger has an alternative proposal.
11	Q	PLEASE DESCRIBE HIS ALTERNATIVE PROPOSAL.
12	Α	His "fallback" position is to allocate the increase by using a combination of an equal
13		percent of revenue and an equal per kWh increase. These methods would each receive
14		a 50% weighting.
15	Q	WHAT IS HIS BASIS FOR PROPOSING THIS ALLOCATION?
16	Α	He argues that because the increase is driven by production function costs, an equal
17		percent increase will over-allocate costs to classes that use the distribution system.
18	Q	IS HE CORRECT?
19	Α	No. First, his analysis assumes that presents rates accurately reflect costs other than

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the increase in net power costs. He also ignores the fact that the Company's cost of

service study fully reflects the level of net power costs that it is requesting. Based on an

analysis of the cost of service results <u>inclusive of the requested net power costs</u>, the Company proposed an across-the-board percentage increase (with limited exceptions) as reflective of those results. As I noted in my direct testimony, that proposal represented a reasonable spread of costs.

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## CAN YOU DEMONSTRATE HOW THE COMPANY'S COST OF SERVICE STUDY ALLOCATES ITS REQUESTED INCREASE IN NET POWER COSTS?

Yes. This can be seen by a comparison of the generation component allocated to each class in the Division's COS to the generation component in the Company's COS. This comparison is shown on Exhibit \_\_\_\_\_ (AC-4). The difference between the Division's generation component and the Company's is \$117 million. This difference in generation costs results primarily from the Company's position on net power costs. Comparison of the two studies shows that the Company's allocation of increased net power costs adds nearly 21% to the revenue requirement of Rate 9 customers and only 12% to the revenue requirement of the residential class and 15% to the total Utah Jurisdiction revenue requirement. This disproportionate allocation is fully incorporated in the Company's study. Since the disproportionate allocation is already incorporated, there is no basis for allocating to Rate 6 and 9 customers a percentage increase larger than the system average.

# Q DO YOU AGREE WITH DR. STERZINGER'S ARGUMENT THAT SPECIAL CONTRACTS NOT BE ALLOCATED A PORTION OF THE REVENUE CREDITS FROM WHOLESALE SALES?

No. Unless he would also propose that there be no allocation of wholesale <u>costs</u> to contracts, it would be blatantly unfair to refuse to allocate wholesale revenues to them.

Clearly, the costs and the revenues are the two sides of the net power cost issue. As

l	Exhibit (AC-4) shows, the special contracts are already allocated the greatest
2	share of the net power costs at issue in this case as a percent of present revenues. In
3	any event, it seems counter-productive to raise this issue at this time because the
1	Company did not seek to increase special contract rates in this proceeding and no party
5	has proposed such an increase.

- 6 Q DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY ON COST OF SERVICE
- 7 AND RATES?
- 8 A Yes, it does.

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**PacifiCorp** 

Comparison of the Division and Company Allocation of the Generation Cost Component

Difference 3.9% 10.9% 9.3% 13.6% 15.0% 22.8% 14.7% 12.3% 15.7% 2.4% 20.9% 15.7% 12.0% Percent 90,226 61,492 6,913 576 349 590 703 Revenue \$311,675 9,097 7,284 1,651 \$800,447 \$309,892 Present ↔ ↔ s S တ S မှာ ↔ છ ↔ Difference 1,573 8,335 \$117,750 48,911 1,142 180 8 223 18,887 85 22 32 \$ 38,271 ↔ क မှ s ↔ ↔ ↔ ₩ છ ₩ S 38,536 233,102 89,736 5,710 148 839 7,581 558,650 1,372 418 154 180,632 421 **Generation in** Company SOS S S မာ မ ↔ S မာ ₩ ₩ ↔ ₩ ₩ ₩ 440,900 70,849 125 629 332 6,008 4,568 122 30,201 142,362 1,150 334 184,191 **Generation in** \$(000) Division cos ↔ မာ မာ မ B S ↔ ₩ બ ₩ တ 6 8 7,11,12,13 Rate သွ 25 <del>1</del>9 23 9 12 12 7 ဖ တ General Service - High Voltage Commercial Space Heating Firm Industrial Contracts General Service - Large General Service - Small Street & Area Lighting Mobile Home Parks Class **Outdoor Lighting** Electric Furnace Traffic Signals Residential Total Irrigation Line 12 9 7 5 က 4 Ŋ 9 ω O ~